

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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COUNTRY	East Germany/USSR	REPORT	
SUBJECT	Export of East German Electronic Tubes to the Soviet Union during the Plan Year 1958-1959	DATE DISTR.	2 OCT 1958
		NO. PAGES	2
		REFERENCES	
DATE OF INFO.			25X1
PLACE & DATE ACQ.			25X1

PROCESSING COPY

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1. shipments of electronic tubes by East German enterprises to the Soviet Union during the plan year 1958-1959. These export shipments are different from those handled by the East German Trade agency for electro-technical products, DIA Elektrotechnik.
2. There are four "programs" in the export; all tubes are marked with Cyrillic letters. The four "programs" are:
 - I. High power transmitter tubes and high voltage rectifier tubes for use as transmitter tubes, for universal and special purposes. Tubes of this type are approximately the equivalent of tubes used in Western Europe. Tubes are manufactured by the VEB Roehrenwerk "Anna Seghers", Neuhaus-am-Rennweg. The planned quota is 6,000 tubes. This list of tube types is given in the document; there are 12 tube types.
 - II. Low and medium power transmitter tubes, all-glass tubes of the Rim-lock(sic) type, for universal and special purposes in both commercial and/or military equipment. The individual types are the same or approximately the same as types used in Western Europe. Part of the order is being filled by VEB Werk fuer Fernmeldewesen (WF) and part by the Anna Seghers Work. The planned quota is 300,000 tubes. The list of tube types is given in the document. There are 30 tube types.

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III. Octal tubes, exclusively for use in fixed and mobile Soviet military receivers and transmitters. Similar tube types are not made for commercial use in Western Europe, although the technical specifications are, with minor variations, the same as octal tubes made in the United States. Consequently, it may be assumed that the tubes are used as replacements in signal equipment given to the Soviet Union by the United States under the Lend-Lease Program of 1939-1945. In place of the all-steel construction of the American tubes, the tubes manufactured in East Germany have a glass envelope which is usually protected with an aluminum **shield**. The East German design causes remarkably fewer rejects, along with good adaptability, than the all-steel design, even though the ^{tubes} are not as sturdy and their outside diameter measurements are somewhat larger. The terminals leading from the electrodes to the octal socket match the socket diagrams of the American-made octal series. In several types, it was attempted in the East German production to boost the final output, which is possible only through a larger hot and/or anode current. East German - produced power tubes of the octal series have a theoretical life of 800 - 1200 operating hours, which is considerably shorter than the American equivalents, since the material used for the electrodes is of a poorer quality than that used in American-made tubes. The production reject rate is about 40%. Some of the rejected tubes are used in East Germany, in measuring equipment. The octal tubes are manufactured by the WF plant in Berlin-Oberschoeneweide. The planned quota for the 1958-1959 plan year is 240,000 tubes. The list of tube types is included in the document; there are 47 tube types, all beginning with "6".

IV.. This series includes tubes for obsolescent German steel tubes of the "E" and "U" series. Production is not difficult since equipment used during the period prior to and during World War II to manufacture these tubes is still available. The tubes are used as replacements in measuring equipment and captured German equipment. Equivalent or approximately the same types for the same purposes are still used in Western Europe. These tubes are manufactured by the VEB Funkwerk Erfurt. The planned quota for the 1958-1959 plan year is 60,000 tubes. The list of tube types is included in the document; there are 20 tube types.

3. Programs II, III, and IV must be subsidized by the government, because the export price, converted from rubles into DME, is much lower than the manufacturing price (Herstellungspreis). The export price for tubes in program II runs, according to type, from 2.60 to 11 DME per tube; the manufacturing price, however, amounts to from 3.80 to 16 DME each. The export price for tubes in program III is from 3 to 16 DME per tube, according to type; the corresponding manufacturing price is from 4.20 to 19.50 DME per tube. The difference in prices for tubes in program IV is not given, but it is stated that the discrepancy is trifling.

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